

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A process of production of a high strength galvanized steel sheet, comprising continuously hot-dip galvanizing a high strength steel sheet having a content of Si of 0.4 to 2.0 wt% in an all radiant tube type annealing furnace, during which introducing a gas containing CO<sub>2</sub> in an amount of 1 to 100 wt% and a balance of N<sub>2</sub>, H<sub>2</sub>O, O<sub>2</sub>, CO, and unavoidable impurities into the annealing furnace, making the atmosphere of a reducing zone an atmosphere containing H<sub>2</sub> to 1 to 60 wt% and the balance being N<sub>2</sub>, H<sub>2</sub>O, O<sub>2</sub>, CO<sub>2</sub>, CO, and unavoidable impurities, controlling, in the atmosphere, the log(PCO<sub>2</sub>/PH<sub>2</sub>) of the carbon dioxide partial pressure and hydrogen partial pressure to log(PCO<sub>2</sub>/PH<sub>2</sub>) ≤ -0.5, the log(H<sub>2</sub>O/PH<sub>2</sub>) of the water partial pressure and hydrogen partial pressure to log(PH<sub>2</sub>O/PH<sub>2</sub>) ≤ -0.5, and the log(P<sub>T</sub>/PH<sub>2</sub>) of the total partial pressure P<sub>T</sub> of the carbon dioxide partial pressure PCO<sub>2</sub> and water partial pressure PH<sub>2</sub>O and the hydrogen partial pressure to -3 ≤ log(P<sub>T</sub>/PH<sub>2</sub>) ≤ -0.5, performing annealing in the reducing zone in a ferrite-austenite two-phase temperature region at 720°C to 880°C, then cooling by a plating bath and performing molten zinc plating so as to form a hot-dip galvanizing layer on the surface of the high strength steel sheet, and then heating for alloying the steel sheet on which the hot-dip galvanizing layer is formed at 460 to 550°C, so as to produce a high strength galvanized steel sheet, wherein the annealing and plating are carried out in an all radiant tube type annealing furnace without an oxidizing zone.

2. (Previously Presented) A process of production of a high strength galvanized steel sheet as set forth in claim 1, characterized by performing the hot-dip galvanizing in a hot-dip galvanizing bath of a composition comprised of an effective Al concentration in the bath of at least 0.07 wt% and the balance being Zn and unavoidable impurities and performing the alloying at a temperature T (°C) satisfying

$$450 \leq T \leq 410 \times \exp(2 \times [\text{Al}\%])$$

where, [Al%]: effective Al concentration (wt%) in the hot-dip galvanizing bath.

3. (Previously Presented) A process of production of a high strength galvanized steel sheet as set forth in claim 1, the effective Al concentration (wt%) in the bath satisfying

$$[\text{Al}\%] \leq 0.092 - 0.001 \times [\text{Si}\%]^2$$

where, [Si%]: Si content in steel sheet (wt%).

4-5. (Canceled)